



# **Waste Receptacle Guideline**

Perisher Range Resorts

Kosciuszko National Park

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## 1. Introduction

# 1.1 Background

The Perisher Range Resorts (PRR) Master Plan (2001) addressed aspects of waste management. A part of the approval process for the Waste Transfer Station (WTS) was a commitment that the National Parks and Wildlife Service (NPWS) would establish and maintain a formal collection service for waste and recyclables from premises within Perisher Valley and Smiggin Holes.

The collection service commenced winter 2011. Since then most buildings have constructed waste storage facilities, only a few are still to finalise their storage.

### 1.2 Aim of the Guideline

This guideline provides direction to premises requiring waste receptacles within Perisher Valley and Smiggin Holes, specifically, the guideline;

- Provides a brief background to waste collection and management in the PRR
- Provides examples of acceptable types of waste receptacles
- Outlines the design requirements for receptacles
- Outlines the approval and construction process.

# 1.3 Application of the Guideline

This waste receptacle guideline applies to all premises within Perisher Valley and Smiggin Holes. Although operating under a different waste management system, the guidance offered in this document can also be applied to premises within Guthega Village.

# 1.4 Waste Receptacle Approval and Construction Steps

Step	Actions	Guideline Section

Section 3

- 1. Determine the type of receptacle that would suit your premises. Most premises would require a waste box (Section 3.1) or waste hut (Section 3.2).
- 2. Determine the required volume Section 4.3 Table 2
- **3.** Prepare a proposal for submission to NPWS that includes the information outlined in this guideline.
- 4. Submit the proposal to NPWS at Perisher Valley Section 5
- **5.** NPWS will consider the proposal put forward and advise if any modifications to the design are required.
- **6.** Once any design issues have been addressed, NPWS will approve the receptacle for construction.
- 7. Arrange for the receptacle to be constructed. NPWS is to be notified of progress at the following stages of construction:
  - 1. At project start-up
  - 2. At completion of the project but prior to receptacle use

# 2. Waste management in the Perisher Range resorts

### 2.1 Waste Streams

The waste streams that are currently managed within the PRR can be categorised into five distinct groups as follows:

- 1. Garbage
- 2. Bottles, cans and plastics (BCP)
- 3. Paper and cardboard (PC)
- 4. Waste cooking oil
- 5. Organic Food Waste.

All streams except garbage are recycled. The NPWS Perisher Team does not collect or dispose of inert solid waste (e.g. building waste, old ski equipment) or waste fuel oils.

# 2.2 Waste Storage

Waste must be stored for collection in a secure waste receptacle such as a waste box, a waste hut, a waste room or, as an interim measure, a NPWS issued wheelie bin.

Within the receptacle, waste must be stored as follows:

Table 1 – Perisher Range Resorts waste stream storage

Waste Stream	Acceptable Storage
Garbage	Heavy duty black or green garbage bags
Bottles, Cans & Plastics	NPWS issued clear plastic bags
Paper & Cardboard	<ul> <li>NPWS issued clear plastic bags</li> <li>Flattened and stored within another box or tied together</li> </ul>
Cooking Oil	Stored and sealed in original container
Organic Food Waste	NPWS issued compostable bin liner

Lessees should call NPWS Perisher for collection of waste cooking oil in the first instance.

To prevent wildlife intrusion, waste should not be left on the snow.

Solid waste such as white goods, old ski equipment and building waste stored at the receptacle will not be collected.

#### 2.3 Waste Collection

The NPWS Perisher Team operates a winter waste collection service for Perisher Valley and Smiggin Holes premises. Winter waste collection will operate from the first Wednesday before the start of the ski season to the first Wednesday after the end of the ski season. Each waste stream will be collected every second day.

# 2.4 Waste Transfer, Transport and Disposal

The Perisher Valley Waste Transfer Station (WTS) was constructed over the summer of 2011/12 and was operational for the 2012 snow season. Waste and recyclables are collected and taken to the WTS. At the WTS, the streams are managed as follows;

- Garbage Transferred to a twin auger compacter via a hopper, the auger compacts the waste into a 30 m<sup>3</sup> bin.
- Bottles, Cans and Plastics Co-mingled recycled is transferred to a 30 m<sup>3</sup> bin.
- Paper and Cardboard Paper and cardboard compacter by twin augers into a 30 m<sup>3</sup> bin.
- Cooking Oil Oil is transported in sealed original containers to Jindabyne landfill for collection and recycling.
- Organic Food Waste- is transported to Sawpit Creek and composited.

## 2.5 Summer Operations

A waste transfer location will operate at the entrance to the WTS where staff and guests can dispose of waste (general household) and recyclables. Solid waste such as white goods, old ski equipment and building waste will not be accepted.

# 2.6 Waste Management in Guthega

Waste and recycling in Guthega Village is managed differently to the other villages of the PRR. Premises are responsible for transporting their waste to communal bins located at the Guthega Ski Centre. Bins are either emptied directly into a compacter truck or are replaced with empty bins and taken off Park.

Although this guideline has been developed for Perisher and Smiggin Holes, the design considerations outlined also suit waste receptacles for Guthega Village.

# 3. Types of waste receptacle

### 3.1 Waste Box

A waste box is structure that is either supported by the premises or is at ground level and is usually top opening. Waste boxes do not generally have shelving but rather open space used to store the waste for collection. Garbage and co-mingled recyclables are stored in bags within the box. Paper and cardboard can be bundled together and secured with twine or within a large cardboard box.

Waste boxes are suitable for covered locations such as on a veranda or at entrances where snow accumulation and access issue are not present.



Figure 1 - Waste box examples (photos Tom Pinzone/OEH)

### 3.2 Waste Hut

Waste huts are free standing structures that can either be attached to or separate from the building and are usually front opening. Internally, the hut can be left as open space or racks and/or bins can be installed. Garbage and co-mingled recyclables must be stored in bags within the hut. Paper and cardboard can be bundled together and secured with twine or within a large box.

Waste huts are suited to locations that are not directly covered by the premises. As such, waste huts must be located and designed to account for snow shedding and storage with access issues and proximity to the premises in mind.

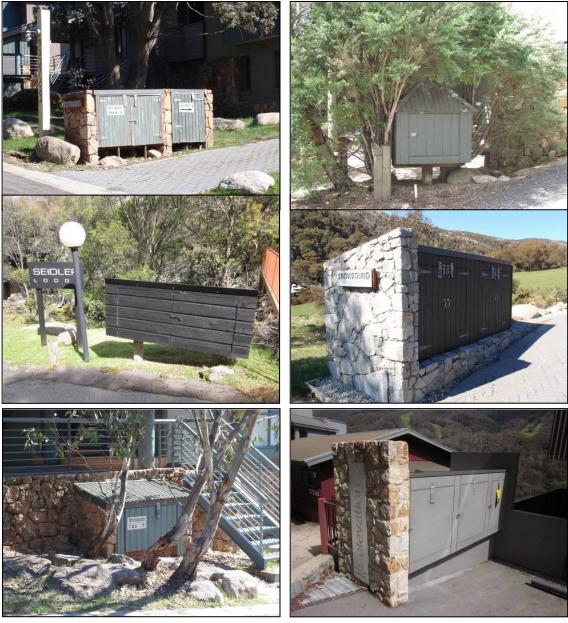


Figure 2 – Waste hut examples (photos Tom Pinzone/OEH)

### 3.3 Waste Room

A waste room is a room attached to, or inside, a premises and is principally designated to the storage of waste for collection. In some cases premises may be able to enclose a previously open area to form a waste room. As waste rooms are generally larger than waste huts or boxes, shelves are usually installed to maximise the amount of waste that can be stored for collection. Garbage and co-mingled recyclables must be stored in bags within the room. Paper and cardboard can be bundled together and secured with twine or within a large box.









Figure 3 - Waste room examples (photos Tom Pinzone/OEH)

# 4. Requirements for waste receptacles

# 4.1 Design Considerations

In keeping with the existing aesthetic values of the PRR, and the requirements of an effective waste receptacle in an alpine environment, the following design considerations should be incorporated into new waste receptacles.

#### 4.1.1 Stonework

Where possible, stonework should be incorporated into the design of waste receptacles to match the accompanying premises and general look of the PRR. Stonework features can be used for added premises signage.

Within the PRR stonework is to be constructed as 'mortar joint' (as opposed to 'dry stack' style used elsewhere).





Figure 4 – Stonework features (photos Tom Pinzone/OEH)

## 4.1.2 Cladding

The must be constructed to suit the cladding and colour palette of the accompanying premises. Walls should be constructed from timber or colorbond and roofs from steel.





Figure 5 – Acceptable cladding examples (photos Tom Pinzone/OEH)

### 4.1.3 Snow Accumulation Shedding and Clearing

Receptacles must be designed with snow accumulation, shedding and clearing provisions in mind. The following outlines key design features for the four types of waste receptacles suitable for the PRR.

#### **Waste Boxes**

As waste boxes are typically top opening, these receptacles should only be installed at protected locations to prevent snow build up on top of the box. Suitable locations would be beneath an awning, on a veranda or at the front entrance to a building.

Waste boxes may be installed at unprotected locations using a sloped lid and opening design. If the box is to be installed at such a location it must be elevated to allow for snow accumulation at the base. At some locations In the PRR, an allowance of one metre may be required. In all cases, the access area should be cleared of snow.

Examples of snow shedding and clearing considerations for typical waste box applications are provided in Figure 6.

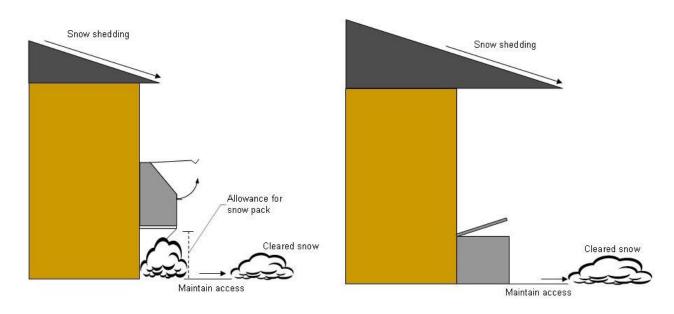


Figure 6 - Snow shedding and clearing considerations for typical waste box applications

#### **Waste Huts**

Waste huts can be constructed either as detached or as attached structures. In both cases, snow accumulation, shedding and clearing must be considered as part of the design. Key design features should include;

- A sloped roof to shed snow
- An allowance for snow accumulation at the base of the hut
- Locating the structure at a suitable location to be able to maintain access and providing adjacent space to store cleared snow
- Premises lease boundary waste huts must be within the existing lease boundary

Examples of snow shedding and clearing considerations for detached waste huts are shown in Figure 7 and examples of attached waste hut considerations are shown in Figure 8.

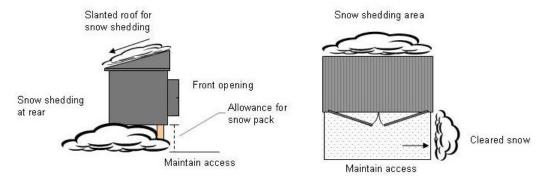


Figure 7 – Detached waste hut snow shedding and clearing considerations

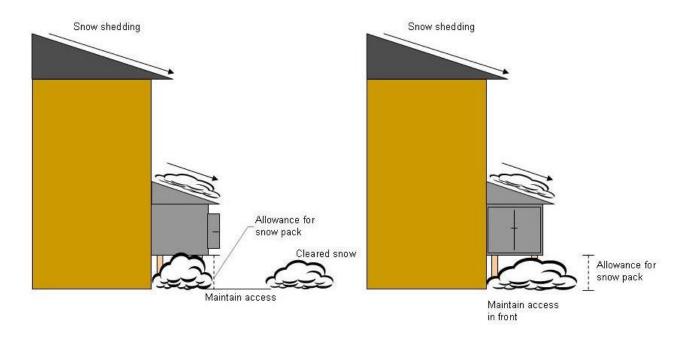


Figure 8 - Attached waste hut snow shedding and clearing considerations

#### **Waste Rooms**

The design of waste rooms not installed in a covered location (such as at a lodge entrance) must consider snow accumulation, shedding and clearing. Key design features should include;

- A sloped roof to shed snow
- An allowance for snow accumulation at the base of the structure to allow for the door to be operable at all snow depths
- Siting the structure at a suitable location to be able to maintain access and providing adjacent space to store cleared snow

Examples of typical considerations are shown in Figure 9.

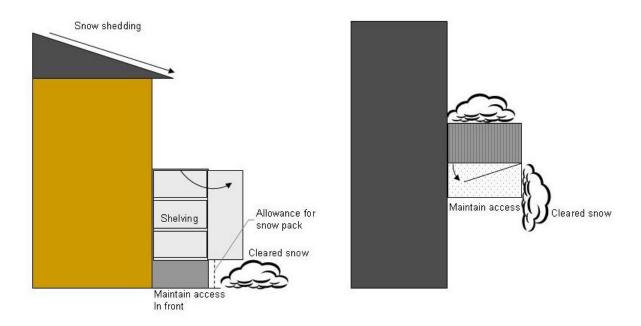


Figure 9 - Examples of waste room snow shedding and clearing considerations

#### **Bins on Trailer**

Premises requiring a bin on a trailer should store the trailer at a location that is both accessible for collection and building staff to dispose of waste. The bin location area should be kept tidy and snow cleared to maintain access for collection vehicles.

### 4.1.4 Security

All waste receptacles must be adequately secured to prevent opening by wind and animal intrusion. Latches and door handles should be mechanically simple to ensure ease of use with gloves, and to prevent ice/snow from interfering with access.

#### 4.1.5 Interiors

Generally, interiors of waste receptacles should be as clear as possible to allow for maximum waste storage (Figure 10 and Figure 11). Waste rooms should be constructed with mesh shelving as per Figure 12. Interiors must be designed to allow for ease of cleaning.





Figure 10 – Waste box interiors (photos Tom Pinzone/OEH)





Figure 11 - Waste huts interiors (photos Tom Pinzone/OEH)





Figure 12 – Waste room interiors showing shelving (photos Tom Pinzone/OEH)

# 4.2 Receptacle Location

Receptacles should be sited at a location that is convenient for both guests/staff and for collection. Snow must be cleared to maintain access to the receptacle and should be carried out as part of the usual building access maintenance activities.

# 4.3 Sizing

Waste receptacles must be designed to provide an internal volume adequate for the storage requirements of the premises. Minimum usable internal volumes based on bed numbers are provided in Table 2.

Table 2 - Waste receptacle volume requirements

Number of Beds	Minimum Usable Volume
1-10	0.6 m <sup>3</sup>
11-20	1.0 m <sup>3</sup>
21-30	1.2 m <sup>3</sup>
31-50	1.5 m <sup>3</sup>
51-100	2.1 m <sup>3</sup>
100+	Bin(s) on trailer

Premises with catering facilities and/or restaurants must consider the need for volumes larger than shown in Table 2 owing to increased waste generation.

# 4.4 Operation

#### 4.4.1 Access

Snow is to be cleared to maintain access to the receptacle. This should be carried out as part of the usual building access maintenance activities.

#### 4.4.2 Waste Storage

Receptacles must be designed and operated to accommodate the storage of waste and recyclables as outlined in Table 1. Garbage must be stored within heavy duty black or green garbage bags, co-mingled recycling must be stored in NPWS issued clear plastic bags and paper and cardboard must be flattened and stored within another box or tied together... Organic food waste must be in compostable bags, and contained within the waste hut. The weight of any waste container must not exceed 15 kilograms.

Loose/unsecure waste or not store as directed above won't be collected.

All other wast should be taken to Jindabyne landfill, this includes; whitegoods, ski gear, furniture and building waste.

#### 4.4.3 Cleanliness

Premises are responsible for ensuring their waste receptacle is kept clean and tidy. As a minimum, receptacles must be thoroughly cleaned at the conclusion of the ski season. Loose waste should not be stored in the receptacle at any time.

# 5. Proposal submission and approval

Waste receptacles would not generally require approval from the Department of Planning, however any proposal that links into the existing building (roof and/or slab) will trigger Development Applications (DA) requirements. Waste huts need to be a stand-alone shelter or a separate shelter on the side of the existing building to avoid a DA.

However, premises must prepare a proposal for submission to NPWS.

The proposal is to include;

- 1. The type and size of the receptacle
- 2. A photo of the proposed location
- 3. A sketch and description of the proposed receptacle (incorporating appropriate design considerations)
- 4. The proposed location shown on a plan
- 5. Proposed operation of the receptacle (snow clearing, access, cleaning etc.)
- 6. Access during construction in particular if access would be over undisturbed areas
- 7. Security arrangements.

Proposals should be forwarded to the Project Engineer at:

National Parks and Wildlife Service

Perisher Team

PO Box 41

Perisher Valley NSW 2624

perisher@environment.nsw.gov.au

NPWS will consider the proposal put forward and advise if a formal DA or any modifications to the design are required. Once any design issues have been addressed, NPWS will approve the receptacle for construction.

NPWS is to be notified of progress at the following stages;

- (i) Prior to commencement of construction
- (ii) At completion of the project but prior to use of the receptacle.

# 6. Enquiries and further information

Project Engineer, Perisher Team NPWS Perisher Valley

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Email: perisher@environment.nsw.gov.au

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